The Reconstruction of "protruding structures" in the restorations between the eighteenth and the nineteenth centuries in Italy. Executive techniques and vulnerability.

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ABSTRACT

In 1891, after the constitution of ten "Regional Offices for the preservation of monuments" (Uffici Regionali per la Conservazione dei Monumenti) a training was started for technical staff specialised in managing the public architectural heritage [1]. The presidents and directors were figures of great cultural and social prestige operating in all regions, while the public officials came from different places and cultural backgrounds. The latter were often transferred and they experimented different technical solutions and construction traditions. Between 1891 and the First World War several restorations of fortresses, castles and medieval public buildings were carried out. The "protruding structures", the corbels and the battlements were the most delicate and worst preserved building elements, but for the public opinion of the time they constituted an essential element of the image and identity of fortified monuments. The remains rarely provided univocal indications, or else models to be precisely reproduced; several remakes had been carried out, even at intervals of a few decades; actually the structures were often temporary, made of wood.

Patrol path, corbels and battlements had therefore to be designed from scratch, the most educated people had to distinguish the ancient parts of the building from the additions. These were very delicate structures, exposed to the elements. The solutions were hybrid, resorting to "new" materials, including the tried-and-tested cement and the more recent reinforced concrete, which had been successfully used in restorations long before their late consecration in the Athens Conference in 1931.

This essay will also examine some examples from the Marche region, in particular the crowning of the Fortress of Arquata del Tronto: its restoration work was first carried out under the authoritative eye of Count Giuseppe Sacconi [2, 3], then by Dante Viviani, a talented expert from Arezzo, having however a Roman formation, and Icilio Bocci [4], who had been the first superintendent of the Marche region since 1908; he had previously worked under Luca Beltrami in the Lombardy Regional Office, where he initiated some problematic interventions on the Palazzo Ducale in Mantua [5]. Some of these cases have been "damaged" by recent earthquakes. Materials, executive techniques, duration and vulnerability of the various examples will therefore be compared.

REFERENCES

- [1] M. Bencivenni, R. Dalla Negra, P. Grifoni, *Monumenti e Istituzioni*, vol. II, Firenze, Ministero per i beni culturali e ambientali, Soprintendenza per i beni ambientali e architettonici per le province di Firenze e Pistoia, Sezione didattica, 1992.
- [2] G. Sacconi, Relazione dell'Ufficio Regionale per la Conservazione dei Monumenti delle Marche e dell'Umbria (1891-1901), Perugia, Guerra, 1903.
- [3] P. R. David, Giuseppe Sacconi, architetto restauratore: 1854-1905, Roma, Gangemi, 1990.
- [4] A. Ruggeri, *Il restauro nelle Marche e gli uffici della tutela nella prima metà del Novecento*, Doctoral Thesis, University of Rome "La Sapienza", 2016.
- [5] G. Moretti (ed.), "Ottava relazione dell'Ufficio regionale per la conservazione dei monumenti in Lombardia: supplementi all'Archivio storico Lombardo", Milano, P. Faverio di P. Confalonieri, 1900.